

Utah State University

DigitalCommons@USU

All Graduate Theses and Dissertations

Graduate Studies

5-1949

Teaching combinations of the men teachers of physical education in the public high schools of Utah

Earl G. Holmstead

Follow this and additional works at: <https://digitalcommons.usu.edu/etd>



Part of the [Health and Physical Education Commons](#)

Recommended Citation

Holmstead, Earl G., "Teaching combinations of the men teachers of physical education in the public high schools of Utah" (1949). *All Graduate Theses and Dissertations*. 1878.

<https://digitalcommons.usu.edu/etd/1878>

This Thesis is brought to you for free and open access by the Graduate Studies at DigitalCommons@USU. It has been accepted for inclusion in All Graduate Theses and Dissertations by an authorized administrator of DigitalCommons@USU. For more information, please contact digitalcommons@usu.edu.

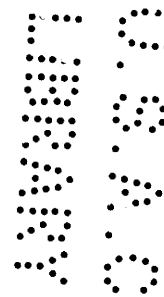


TEACHING COMBINATIONS OF THE MEN TEACHERS OF PHYSICAL EDUCATION
IN THE PUBLIC HIGH SCHOOLS OF UTAH

by

Earl G. Holmstead

A thesis submitted in partial fulfillment of the requirements
for the degree of
Master of Science
in
Physical Education



UTAH STATE AGRICULTURAL COLLEGE

1949

378.2

H 739

ACKNOWLEDGEMENT

I wish to express sincere appreciation to Glen Arnett, the recent Director of Health, Physical Education, Recreation of State of Utah, for his help in securing the data concerning the physical education teachers. To the superintendents and principals of the high schools of Utah, who filled out and returned questionnaires I also express my gratitude. I acknowledge, also, the valuable suggestions of Professor H. B. Hunsaker, which led to the selection of this problem. Thanks are due the members of my committee who graciously gave of their time and advice.

TABLE OF CONTENTS

Chapter		Page
I	INTRODUCTION	1
	Importance of Problem	5
	Statement of Problem	6
	Scope of Problem	6
	Method of Procedure	7
II	REVIEW OF RELATED STUDIES	9
	Securing Related Material	9
	Review of Literature	9
	Summary of Related Studies	15
III	SUBJECT COMBINATIONS	16
IV	TEACHER PREPARATION	36
V	ADMINISTRATIVE POINT OF VIEW	42
VI	SUMMARY	55
VII	CONCLUSIONS AND RECOMMENDATIONS	59
	LITERATURE CITED	60
	APPENDIX	63

TEACHING COMBINATIONS OF THE MEN TEACHERS OF PHYSICAL EDUCATION IN THE PUBLIC HIGH SCHOOLS OF UTAH

Chapter One

INTRODUCTION

The almost universal acceptance of physical education as an integral part of education has resulted in state legislation throughout the United States requiring the teaching of physical education in the public schools. Because of this legislation, it has become necessary to better prepare teachers to carry on a worthwhile physical education program. Efficient teaching cannot be expected to result from lack of training and inadequate preparation; therefore, the college graduate who holds a degree with no specialized training is not adequately prepared to teach effectively and efficiently in our school systems of today.

In regard to the qualifications and functions of physical education teachers, Ruth Elliott says:

The most outstanding need in the field of physical education is for studies in the qualifications and functions of the physical education teacher as in any other phase of education. No scientific study of the curriculum is possible without a determination of the function of the teacher. Curricular studies in physical education are urgently needed in order to set standards for the kind and amount of training necessary for adequately trained leaders and experts in physical education in all of its many phases. (6, p. 6)

Jay B. Nash states:

It has been a comparatively short time since state legislation gave to physical education an impetus by enactment of laws requiring its teaching in all public schools.

To meet this requirement, institutions started curricula designed to train teachers of physical education, and by 1931 this new teachers training movement had become so widespread

as to include 210 institutions offering a four year major with a bachelor's degree, not to mention those with two and three-year majors. (15, p. 225)

Practically all of the states have set up some legislative requirements by which a teacher may be certified. After fulfilling these requirements, an individual is eligible to teach in the schools of the state. The assumption is that the training received is sufficiently general for an individual to be able to teach any subject. In many states the granting of a liberal arts degree fulfills this requirement. This type of certification is not adequate and leaves much to be desired. Under this type of certification an individual studying English, history, art, mathematics or languages can be certified; and because of his athletic ability, he is selected to teach physical education and coach in the secondary schools. This type of unpreparedness can become very serious in the terms of the physical welfare of boys and girls.

The unprepared teacher who attempts to teach children in the vigorous physical education activities lacks the academic knowledge of first aid, the effects of activities on the human organism, the dangers of allowing children with certain physical defects to participate in vigorous activities, the symptoms of fatigue and the conduction of modern programs of physical education and is, therefore, assuming a serious responsibility. Some progress has been made in securing prepared teachers, but this progress has been slow in comparison to the needs.

Yocom and Hunsaker state:

Past and present teaching and training methods will have to be analyzed in light of present and future needs of a constantly changing world in order to fulfill the philosophies, aims and objectives of physical education.

Successful instruction in physical education would realize the objectives of education and of physical education as they concern the development of good social habits and attitudes, love of wholesome play, neuromuscular co-ordination, wholesome use of leisure time and organic vigor. (29, p. 2)

Future anticipated changes, such as more densely populated areas, higher standards of living, increased leisure, new scientific discoveries, and the growing need for recreational guidance will constantly change the interpretation of educational theory, and thus influence physical education.

In regard to teacher preparation, Davis and Lawther say:

Students preparing to teach physical education in some states are greatly surprised to learn that in other states no certification in physical education is required.... Many other states require four years of professional training with the accompanying baccalaureate degree. The trend in state certification seems to be toward the requirements of a fifth year. The fact is, therefore, that there are teachers who are unprepared to teach physical education but have positions with this responsibility. (5)

Voltmer and Esslinger say:

The minimum requirements for either elementary or high school physical education teachers should be a bachelor's degree with a major or minor in physical education. The major qualifies one much better to teach physical education, but many instructors must teach other subjects in these two types of schools, especially in the smaller cities and rural communities. Therefore, they must major in other fields in order to get a teaching position..... The major student, is admittedly better qualified to teach than is the minor student. For that reason a minor is suggested as worthwhile in the teacher training setup. (23, p. 132)

Jay B. Nash states:

The only solution of this problem is the requirement of majors and minors in this general training to have some type of specialization required. (15, p. 329).

The growth and development of physical education in Utah progressed very slowly until 1930, when a new public school constitution was formed and renewed interest in physical education took place. However, the schools of the state made very little effort to cooperate until 1935 when the Division of Health, Physical Education and Recreation was formed under the directorship of Miss Bernice Moss, as a part of the Department of Public Instruction.

The State Course of Study Committee in 1937 placed health and physical education as a required daily program in the junior high school division and in two of the three years in the senior high school division. The majority of the schools have organized their programs on this basis.

The physical education program in Utah during the last decade has been undergoing interesting changes and developments, most of which are aimed at a more adequate recognition of and attention to the physical, social, character and recreational needs of all boys and girls.

To be certified to teach physical education in Utah, one must be a college graduate and certified or authorized by the State Department of Education, as having passed the requirements of the state office. The recommendations are that the prospective teacher has either a major or a minor in the field in which he is to teach. Some schools, however, will hire a man who is certified in other fields to teach physical education because of his prowess and efficiency on college athletic teams.

Fortunately, most school administrators are now recognizing the need for physical education teachers to be more adequately prepared in

the field of physical education in order to meet the essential needs of the student.

Importance of Problem

Physical education is a comparatively new addition to our school curriculum; this condition, added to limited facilities and small enrollments in many of our schools, necessitates that all teachers be prepared in more than one field. Hence, the physical education expert must teach other subjects in conjunction with physical education. The rising cost of living plus the lack of teachers have helped to add to the responsibility of physical education teachers in many schools. These developments have caused increased emphasis to be placed on the importance of physical education teachers being qualified to teach some other subjects in addition to physical education.

In the postwar period, there are many conditions existing that indicate a greater emphasis on physical education. Already a great number of young men have returned to colleges to resume their interrupted education. Together with other young men, many of them plan to enter the field of physical education as their life work.

Since it seems a common practice for physical education teachers to teach one or more subjects in combination with physical education, it is believed that the prospective teachers and persons engaged in teacher training and teacher selection should have some knowledge of the subject combinations most frequently in demand with physical education. It would seem imperative that such persons have this information available for use in guiding themselves and prospective teachers of physical education in the selection of suitable subject combinations in physical education teacher training.

Statement of Problem

This study presents the "Teaching Combinations of the Men Physical Education Teachers in the Public High Schools of Utah for the School Year 1945-46."

The main problem of this study is to determine the type of teaching combinations used in the high schools of the State of Utah and to ascertain by comparison if the type used is in accord with the opinions of the superintendents and principals of these schools and the directors of physical education teacher training in the colleges of Utah. It is also a problem of this paper to determine what minors would be best for a man majoring in physical education by obtaining the opinions of the superintendents, the principals of the high schools, and the directors of teacher training in the colleges of Utah. Another major problem of this paper is to find out whether some of the men teaching physical education are prepared to teach physical education.

The writer of this paper realizes that the contents of this study would only be true for this year (1945-46), because the situation is always changing.

Scope of Problem

No attempt is being made in this study to include all phases of physical education instructor's teaching combinations. Because of the vastness of this problem one of the major concerns in the connection with this paper has been that of delimitation.

To get a true picture of the problems concerned with this paper, it was decided to include all of the men teachers teaching physical

education in all of the public high schools in the state of Utah for the school year 1945-46. There were at the time of this paper 109 such teachers in 73 public high schools.

In addition to presenting the teaching combinations and preparation of teachers, this survey gives the opinion of principals, superintendents and directors of physical education teacher training. These opinions are presented in this thesis as one of its important parts.

Method of Procedure

The steps in the collection and treatment of data in this paper are presented in the following order:

(1) A selection of the phases of the problem to be dealt with was made after a wide reading of literature in the field and through consultation with the chairman of the department of physical education at the Utah State Agricultural College on current problems in the field of physical education training and physical education teacher placement.

(2) The teaching combinations and preparation was obtained from the State Department of Public Instruction in Salt Lake City, Utah, from the reports of principals sent to the Education Office. These data were secured with the help of Glen Arnett, State Director of Health, Physical Education and Recreation.

(3) It was decided to include all of the public high schools in the state of Utah in order to get a complete picture of the problem involved.

(4) The questionnaire method of obtaining additional information from principals, superintendents and directors of physical education was selected.

(5) The questionnaires were mailed with a letter explaining the problem together with a self-stamped envelope. This was done that better returns might be made.

(6) The data are divided under three main headings: (a) Teaching combinations of physical education teachers, (b) Preparation of teachers, (c) Opinions and recommendations of principals, superintendents and directors of physical education teacher training. Each section contains tables and a discussion of them.

(7) The final section is composed of conclusions and recommendations.

Chapter Two

REVIEW OF RELATED STUDIES

Securing Related Material

Material related to this study was found in the Utah State Agricultural College library, physical education library, and from sources obtained through the inter-library loan. Related material found in the college library was very meager. The inter-library loan affords the principal method in securing related material and literature. About thirty volumes were received from colleges and universities from all parts of the country. This method proved to be costly and time consuming. After ordering and waiting for the material to arrive it was often found that titles under which studies were ordered were misleading and the material was of no significance to this study. A few, however, were useful. These, together with the professional literature found in the college library and in the physical education library formed the source of materials used. A summary of works referred to is presented in literature cited.

Review of Literature

In reviewing related studies the writer found only a few which were directly related to the problem presented by this paper. The lack of material on this particular phase in the field of physical education is probably due to the rapid, recent development of this subject in the school curriculum. However, studies on general teacher training and teacher combinations have been reviewed with the belief that they may have a bearing on physical education. Some of these studies will be reviewed in this paper.

Woody (25) sent a questionnaire to the beginning high school teachers in Michigan. He found that the average beginning teacher taught at least two subjects besides physical education. He found that 60 teachers were teaching subjects in which they had made some preparation while they were college students. Thirty-three of the teachers had special academic preparation for only one of the subjects which they were teaching, while 12 teachers were teaching subjects for which they had had no special academic training. The author concludes that the beginning teacher may have to teach subjects for which he is not prepared. He suggests that prospective teachers should prepare to teach at least three different subjects.

Woody (26), in another study in Michigan, found that 78 out of 147 teachers of physical education were teaching physical education in combination with one other subject, and four were teaching physical education in combination with two other subjects. The combination of physical education with mathematics occurred most frequently, history appeared next in order of frequency, while social studies ranked third.

J. A. Bear (2) in 1927 in Illinois, found that about 31% of the men teaching physical education were inadequately prepared academically. He further found that 61.5% of the high school teachers included in this study were teaching either their major or minor subjects only, and that more women were thus engaged than men. He found that only 62% of the entire group taught what they were prepared to teach.

Moore (14) made a study of 1037 teachers of health and physical education in the public schools of Indiana in 1928. His study showed that only in high schools of more than 600 pupils were physical education teachers teaching only physical education. In high schools of

between 200 and 600 students usually one subject in addition to health and physical education was taught by the teacher. Teachers in schools smaller than 200 student enrollment should prepare themselves in related fields since it is necessary for them to teach several subjects in addition to health and physical education. He also stated that teacher training institutions should recognize the need for their graduates to be trained in at least three fields if they are to have a reasonable opportunity for employment.

Rhodes (17) made a study in Pennsylvania in 1929. He found a large number of teachers were teaching in their specialized fields, and also teaching in two or three fields in addition to the field in which they specialized while they were college students. His results fail to show the teaching combination of experienced teachers.

Heige (8) in a similar study in Pennsylvania says that one of the first problems encountered by the prospective teacher is: "What shall I teach?" The problem of the teacher training institution is "What shall they be prepared to teach?" Heige found that of 7,834 teachers, 3.7 per cent, or 280, of them were teaching physical education. In this group 194, or 66.4 per cent, of the physical education teachers were also teaching history. Fifty-three, or 18.2 per cent, of the physical education teachers, in addition to their physical education work, taught one of eleven other subjects (other than history); thirteen, or 4.5 per cent, of the physical education teachers were also teaching 2 or 3 other subjects. The most frequently taught combination with physical education was history; this was followed by mathematics.

Coombe (4) in his study of the class B and C high schools in Michigan in 1932, found that of 189 teachers engaged in the teaching of physical education only 30 were teaching that subject alone. The remaining 150 were teaching physical education with one to seven other subjects. The subjects most frequently taught, in addition to physical education, were subjects in the fields of science and social studies. The subjects in the field of mathematics ranked a close third. Relative to the individual subjects taught in connection with physical education, history was most frequently taught, followed by geometry, industrial arts, physics and biology. Only 49.7 per cent of the men studied were adequately prepared to teach physical education; that is, they had either a major or a minor in physical education, and there was a decided lack of preparation for teaching most subjects taught in addition to physical education. Twenty-two per cent of these men did not hold a bachelor's degree from any college. Only 17.6 per cent had received graduate credit, and only two held masters' degrees.

Coombes concluded that it would be well for physical education students to prepare to teach from one to three subjects in the high school and that the best fields from which to choose these subjects are science, social studies and mathematics.

Tuberville's (22) study shows that the majority of men teachers in Missouri teach physical education in combination with other subjects. The most frequent was science, followed in order by social studies, mathematics and agriculture.

Miller (13) found in Ohio that the greatest number of teachers, 119 in number, averaged between two and three classes a week in physical education. Sixty-four men of a total of 323 teachers met a physical

education class at least once a week. One hundred and twelve different subjects were listed by the 323 teachers as being taught. The most popular combinations were physical education and natural science, followed by physical education and social science, physical education and mathematics. In preparation, 167 of the 323 had majors in physical education. He concluded that it would be best to be prepared to teach in two other subjects besides physical education.

Street (21) says, "While it is probably not desirable to restrict the majors or minors to be combined with physical education to a few closely related subject fields, the student should understand that certain combinations are more in demand than others." The large majority of inexperienced teachers must begin work in the smaller schools where the probabilities are that they will have to teach three or four other subjects besides physical education. All four year teacher training curricula should require two minors in addition to a major. The most satisfactory subject fields for major or minor combinations with physical education for men would seem to be: biology-physiology, health-hygiene, history, social science, mathematics, chemistry, physics and industrial education. Certification standards should be such that teachers will be required to have a reasonable degree of preparation for all subjects which they teach. Continuous study should be made in all the states of the various problems relating to teacher supply and demand so as to produce a better balance between the teacher-preparation programs and the needs of the public schools.

Lodewyks (11) studied the class A and D Public High Schools in Michigan. Class A high schools had an enrollment of 700 students and

over. Class D high schools had an enrollment less than 100 students. In class A schools the teacher had to teach one and at the most two other subjects besides physical education. Health was most frequently taught in conjunction with physical education, followed in order by history, chemistry and mathematics. In class D schools the teacher of physical education taught on the average at least three other subjects. Mathematics was most frequently taught, followed by history, civics and biology. He concluded that many teachers were inadequately prepared to teach some of the subjects they were teaching. He recommended that prospective teachers of physical education should be prepared to teach at least two subjects besides physical education.

Mason (12) in his study of 218 teachers of physical education in western Pennsylvania found that 31 out of the 218 were teaching only physical education. The remaining 187 were teaching physical education in combination with one to six other subjects. Physical education and health were the most frequently mentioned two-subject combinations. The 218 teachers of physical education were teaching 101 different combinations. The subjects most frequently taught in addition with physical education were subjects in the fields of social studies, science, and health. Health was the most frequently taught individual subject followed by history, civics, general science and algebra.

Mason found that nearly 8 per cent of the men teachers of physical education did not have any type of college degree. He recommended that students preparing to enter the field of physical education should plan to teach two or three subjects besides physical education, and that these subjects should preferably be in the fields of social studies, science, health, or mathematics.

Summary of Related Studies

In reviewing related studies the author found that teachers of physical education are teaching a great variety of subjects besides physical education; and the combinations of subjects they are teaching are also of a great variety. Authors of these studies conclude that a teacher training institution should offer broad survey courses in the more specialized fields of work since beginning teachers are called upon to teach at least one to three or more subjects in combination with their major field of physical education.

The data concerning physical education in these studies show that many instructors of physical education teach other subjects. In most cases they are called upon to teach one to three subjects in addition to physical education. In many instances the teacher has not had sufficient training and preparation to teach these other classes. History, social studies, mathematics and science are the most frequently mentioned subjects which are combined with the teaching of physical education.

Chapter Three

SUBJECT COMBINATIONS

The studies cited in the review of literature show that the combination of subjects studied while in college vary greatly and that teachers of physical education upon graduation from colleges and universities are required to teach a wide range of subjects in the public high schools of the nation.

The existence of multiple teaching combinations for physical education teachers raises the problem of its occurrence in the public high schools of Utah. Material for the school year of 1945-46 has been gathered and analyzed for subject combinations. There are 109 teachers in 73 high schools in Utah who teach physical education.

The Situation in Utah

The classification of this material in table 1 reveals that only 26 teachers out of 109 teach only physical education. Thirty-five teachers are assigned one subject in addition to physical education; twenty-one teach two other subjects; sixteen teach three other subjects; six have four other subjects, and five teach five other subjects in addition to physical education. The order of greatest frequency of these assignments in the one subject combination, which comprises 32.1 per cent of all teachers. The next highest, with 23.9 per cent, is the group teaching only physical education. This is followed by the 19.3 per cent of the whole group having two additional subjects, and those with three additional subjects make up 14.6 per cent. All other remaining combinations comprise only 10.1 per cent of the entire group. During the school year of 1945-46, the men teachers of physical education in Utah handled as many as five classes in addition to physical education.

Table 1. Number and percentage of men teaching the different types of subject combinations with physical education in high schools of Utah for school year 1945-46.

Subject combination	Times mentioned	Percentage
Physical education only	26	23.9
Physical education and one other subject	35	32.1
Physical education and two other subjects	21	19.3
Physical education and three other subjects	16	14.6
Physical education and four other subjects	6	05.5
Physical education and five other subjects	5	04.6
TOTAL	109	100.0

The subject most frequently taught in conjunction with physical education in one subject combination is health. Ten men or 9.1 per cent have this assignment, which seems to be a natural one. The two subjects having second greatest frequency are mathematics and physiology, each with three teachers. Nine other subjects are taught singly with physical education. These are biology, consultant, dean of boys, first aid, shop, civics, and Spanish. (Table 2).

The extent and frequency of teaching other subjects are summarized in tables 3, 4, 5 and 6.

Table 7 reveals that the physical education teachers in the state of Utah, 109 of them, teach 39 different subjects in addition to physical education. Out of these 39 subjects, health was taught by 24 teachers, 22 teachers listed history, and 18 listed mathematics. Physiology and science were next in line with 11 teachers teaching those subjects in addition to physical education.

In reviewing related material little was found on the problem relating to whether or not the physical education teachers taught the same subjects from year to year. It is the belief of some leaders in the field of physical education that some teachers do not teach the same combination of subjects from year to year, especially in high schools of small enrollment; that is, they may be assigned to teach history and health one year and the next year teach physiology and mathematics.

Table 8 shows that many teachers in Utah for the school year 1945-46 did not teach the same subjects in addition to physical education from one year to the next. In the high schools of Utah for the year 1945-46 there were 58, or approximately 53 per cent, of the teachers

who taught the same subject or combination of subjects from year to year. That is, they could count on teaching the same subjects each year and not worry about having to prepare to teach other subjects. On the other hand, there were 51, or about 47 per cent, of the teachers teaching physical education who did not teach the same subject or combination of subjects from year to year. (Table 9)

Table 2. Subject combinations for 36 men teachers of physical and one other subject in high schools of Utah for school year 1945-46.

Subject combination	Number of teachers assigned	Per cent
Health	10	09.1
Mathematics	8	07.2
Study hall supervision	3	02.8
Physiology	3	02.8
History	2	01.8
Science	2	01.8
Biology	1	00.9
Consultant	1	00.9
Dean of Boys	1	00.9
First aid	1	00.9
Shop	1	00.9
Civics	1	00.9
Spanish	1	00.9

Table 3. Subject combinations for 20 men teaching two subjects in addition to physical education in high schools of Utah for the school year 1945-46.

Subject combinations	Number of teachers assigned	Per cent
Health, history	2	01.8
Health, algebra	1	00.9
Health, physiology	1	00.9
Health, science	1	00.9
Health, civics	1	00.9
Civics, American history	1	00.9
Civics, mathematics	1	00.9
Civics, American problems	1	00.9
American history, mathematics	1	00.9
World history, chorus	1	00.9
Mathematics, shop	1	00.9
Algebra, speech	1	00.9
Science, office	1	00.9
Science, biology	1	00.9
Biology, social science	1	00.9
Chorus, band	1	00.9
Agriculture, farm shop	1	00.9
Grade school, social studies	1	00.9
Reading, speech	1	00.9

Table 4. Subject combinations for 16 men teachers of physical education teaching three additional classes in high schools of Utah for school year 1945-46.

Subject combination	Number of teachers assigned	Per cent
American problems, shop, physiology	1	00.9
American problems, health, mathematics	1	00.9
History, health, bookkeeping	1	00.9
History, physiology, world history	1	00.9
Geometry, chemistry, physics	1	00.9
Health, eugenics, physiology	1	00.9
Aeronautics, physics, health	1	00.9
Algebra, health, mathematics	1	00.9
Civics, U. S. history, world history	1	00.9
Physiology, shop, science	1	00.9
Science, mathematics, algebra	1	00.9
Vocational agriculture, shop, agriculture	1	00.9
Social science, study hall, physiology	1	00.9
Civics, history, mathematics	1	00.9
Agriculture, farm shop, shop	1	00.9
Art, history, science	1	00.9

Table 5. Subject combinations for 5 men teaching four subjects in addition to physical education in high schools of Utah for school year 1945-46.

Subject combination	Number of teachers assigned	Per cent
Mathematics, science, agriculture, religion	1	00.9
Mathematics, science, business essentials, commercial law	1	00.9
Mathematics, history, health, physiology	1	00.9
American problems, civics, band, office	1	00.9
American problems, accounting, business problems, type	1	00.9

Table 6. Subject combinations for 5 men teaching five subjects in addition to physical education in high schools of Utah for school year 1945-46.

Subject combinations	Number of teachers assigned	Per cent
World history, music, shop, science, geometry	1	00.9
World history, civics, health, social science, American history	1	00.9
History, mathematics, algebra, economics, science	1	00.9
History, biology, English, guidance, arts and crafts	1	00.9
Chemistry, biology, health, study hall, physiology	1	00.9

Table 7. Number of times and percentage of times the different subjects were listed in combination with physical education in high schools of Utah for school year 1945-46.

Subject	Number of times listed with physical education	Per cent
1. Health	24	14.4
2. History	22	13.1
3. Mathematics	18	10.8
4. Physiology	11	06.5
5. Science	11	06.5
6. Civics	9	05.4
7. Industrial arts	8	04.9
8. Algebra	6	03.6
9. American problems	6	03.6
10. Agriculture	4	02.4
11. Biology	4	02.4
12. Study hall	3	01.8
13. Geometry	3	01.8
14. Social studies	3	01.8
15. Speech	2	01.2
16. Farm shop	2	01.2
17. Office	2	01.2
18. Chorus	2	01.2
19. Band	2	01.2
20. Chemistry	2	01.2
21. Physics	2	01.2
22. Bookkeeping	2	01.2
23. Eugenics	2	01.2
24. Business essentials	2	01.2
25. Consultant	1	00.6
26. Dean of boys	1	00.6
27. First aid	1	00.6
28. Spanish	1	00.6
29. Reading	1	00.6
30. Grade schools	1	00.6
31. Aeronautics	1	00.6
32. Religion	1	00.6
33. Commercial law	1	00.6

(continued on next page)

Table 7 (continued)

Subject	Number of times listed with physical education	Per cent
34. Type	1	00.6
35. Music	1	00.6
36. English	1	00.6
37. Economics	1	00.6
38. Guidance	1	00.6
39. Art	1	00.6

Table 8. Teachers of physical education, subject or subjects taught, college major and minor, and whether these teachers teach the same subject combination from year to year for the school year 1945-46 in the state of Utah.

Teacher	Subjects taught	College major	College minor	Are same subject combinations taught from year to year
1	Physical education	Physical education	Geology	yes
2	Physical education	History	Political Science	no
3	Physical education	Physical education	History	yes
4	Physical education	Physical education	History	yes
5	Physical education	Physical education		yes
6	Physical education	Physical education	Physiology	yes
7	Physical education	Physical education		no
8	Physical education	Physical education	Physiology	yes
9	Physical education	Economics	Speech	no
10	Physical education	State authorized		
11	Physical education	Physical education	Speech	no
12	Physical education	Mathematics	Physical education	no
13	Physical education	Physical education		yes
14	Physical education	Physical education		yes
15	Physical education	State authorized		no

Table 8 (continued)

Teacher	Subject taught	College major	College minor	Are same subject combinations taught from year to year
16	Physical education	Physical education		yes
17	Physical education	Physical education		no
18	Physical education	Physical education	Social science	yes
19	Physical education	Physical education		yes
20	Physical education	State authorized		yes
21	Physical education	Physical education		yes
22	Physical education	Physical education		no
23	Physical education	Physical education	Zoology	yes
24	Physical education	Physical education	History	yes
25	Physical education	Physical education		yes
26	Physical education	Physical education		yes
27	Health	History	Mathematics	no
28	Health	Physical education	Economics	yes
29	Mathematics	Physical education	Animal husbandry	
30	Biology	Physical education		no

Table 8 (continued)

Teacher	Subject taught	College major	College minor	Are same subject combinations taught from year to year
31	Consultant	Physical education		yes
32	Study hall	Physical education	Animal husbandry	no
33	Dean of boys	Physical education		yes
34	Mathematics	Mathematics	Physical education	yes
35	Library	Physical education		no
36	First aid	Physical education	Physiology	yes
37	American problems	Not listed		yes
38	Physiology	Physical education	Social science	yes
39	Health	Physical education	Health	
40	Health	Physical education	Health	
41	Health	Physical education	Health	yes
42	Health	Physical education	Health	yes
43	Health	Business		yes
44	Health	Physical education	Health	yes
45	Industrial arts	Physical education	History	yes
46	Geometry	German	Greek	no

Table 8 (continued)

Teacher	Subject taught	College major	College minor	Are the same subject combinations taught from year to year
47	Science	State authorized		
48	History	Physical education	History	yes
49	Health	Physical education	History	
50	Science	Physical education	Sociology	
51	Mathematics	Normal certificate		no
52	Civics	Physical education	Health	yes
53	Mathematics	Botany	Physical Education	no
54	Mathematics		Physical education	
55	Mathematics	State authorized		no
56	Health	Physical education	Health	no
57	Physiology	State authorized		no
58	Physiology	Physical education	Physiology	yes
59	Algebra	Physical education		yes
60	History	History		yes
61	Speech, algebra	Physical education		no
62	Physiology, history	History	Political science	yes

Table 8 (continued)

Teacher	Subject taught	College major	College minor	Are the same subject combinations taught from year to year
63	History, civics	State authorized		yes
64	Algebra, health	Physical education	Mathematics	yes
65	Health, physiology	Physical education	Health	yes
66	Health, history	Physical education	Health	yes
67	Mathematics, civics	Political science	History	yes
68	Mathematics, shop	State authorized		no
69	Agriculture, farm shop	Animal husbandry	Agronomy	yes
70	History, mathematics		Physical education	no
71	Civics, history	State authorized		no
72	Science, office	Physical education	Science	no
73	American problems, civics	Secondary education	Physical education	yes
74	Social studies, biology	Physical education	Social science	yes
75	Chorus, band	Music	Physical education	yes
76	Reading, speech	Speech	Physical education	yes
77	Civics, health	Physical education	Social science	yes
78	Grade school, social science	Secondary education	Botany, zoology	no

Table 8 (continued)

Teacher	Subject taught	College major	College minor	Are the same subject combinations taught from year to year
79	Chorus, history	Music	Physical education	yes
80	Spanish, coordinator	Spanish	Physical education	yes
81	History, health	Physical education	Secondary education	
82	Biology, science	Physical education	Botany	
83	History, civics	Social science	Physical education	no
84	Science, health	Physical education	General science	yes
85	Mathematics, science	Secondary education	Physical education	no
86	Geometry, chemistry, physics	Exact science		no
87	Shop, American problems, physiology	State authorized		no
88	Mathematics, American problems, health	Physical education	Science	yes
89	History, health, book-keeping	State authorized		yes
90	Health, eugenics, physiology	Physical education	Health	yes
91	Aeronautics, physics, health	Economics		yes

Table 8 (continued)

Teacher	Subject taught	College major	College minor	Are the same subject combinations taught from year to year
92	Algebra, health, mathematics	Secondary education	Sociology	yes
93	Physiology, shop, science	Normal degree		no
94	Social science, mathematics, algebra	State authorized		yes
95	Vocational agriculture, shop, agriculture	Agronomy	Animal husbandry	yes
96	Physiology, social science, study hall	Physical education	Secondary education	yes
97	Civics, history, mathematics	Business	Economics	
98	Health, civics, social studies	Physical education	Physiology	
99	Agriculture, shop, farm shop	Animal husbandry	Agronomy	yes
100	Civics, office, band, American problems	Music	Education	yes
101	American problems, business, type, accounting	Business administration	Economics	yes
102	Science, mathematics, agriculture, religion	Physical education	English	no

Table 8 (continued)

Teacher	Subject taught	College major	College minor	Are the same subject combinations taught from year to year
103	Science, mathematics, business essentials, commercial law	Physical education	History	no
104	History, American problems, civics, science	Social studies		
105	Health, mathematics, history, physiology	Physical education	Social science	no
106	History, science, music, shop, geometry	Music	History	no
107	Chemistry, biology, health, study hall, physiology	Science	Health	no
108	Algebra, mathematics, economics, history, science	Mathematics	History	no
109	Biology, English, history, guidance, arts, and crafts	Normal certificate		no

Table 9. Number and percent of instructors who teach the same subject or combinations of subjects from year to year in the high schools of Utah for 1945-46.

	Number	Per cent
Men in physical education who teach the same subject or combination of subjects from year to year	58	53.2
Men in physical education who do not teach the same subject or combination of subjects from year to year	51	46.8
TOTAL	109	100.0

Chapter Four

TEACHER PREPARATION

In determining whether a teacher ought to teach the different subjects of the school curriculum, the writer of this paper read widely the opinions of leading educators in the United States. Practically all recommended that to be adequately prepared to teach a subject a teacher should have a major or at least a minor in the subject he is assigned to teach.

Voltmer and Esslinger state:

The minimum requirements for either elementary or high school physical education teachers should be a bachelor's degree with a major or minor in physical education. The major qualifies one much better to teach physical education The major student is admittedly better qualified to teach than is the minor student. Many instructors must teach other subjects in addition to physical education; therefore, a minor is suggested as worthwhile in the teacher training set up. (23, p. 123)

The writer realizes that many subjects in the school curriculum are very closely related to each other, and that some college preparation along this line may have qualified the teacher to teach a particular subject. Because the teacher has taught the subject and has taken summer school classes and extension classes, it is possible that he may have become qualified to teach these classes. Because of the vastness of the problem of teacher preparation, it was decided to delimit the problem to teachers having either a major or minor in the subjects they are assigned to teach.

The State Department of Public Instruction made certain requirements that prospective teachers had to meet in order to become certified

to teach in the public high schools of Utah. Upon fulfilling these requirements, a certificate was given entitling the teacher to teach in the high schools of Utah, with the stipulation that every five years these certificates have to be renewed by taking seven additional hours of college credit.

Because many of the teachers in Utah answered the call to arms during World War II, a shortage of certified teachers resulted. To meet this shortage and to keep the schools open, many teachers had to be replaced by persons who could not meet the certification standards. These people were given a letter of state authorization enabling them to carry on in the educational set-up.

Table 10 shows that 71, or 65 per cent, of the teachers of physical education had the General Secondary Certificate, 17, or 15.6 per cent, of the teachers had life certificates, 21, or 19.3 per cent, were not certified under the regulations set up by the State Board of Education, and were given a letter of authorization by the State Department of Education entitling them to teach under certain provisions.

This would indicate that approximately 80 per cent of the teachers who are teaching physical education in Utah are certified to teach in the high schools. There are approximately 19 per cent of the teachers who haven't fulfilled the requirements necessary to qualify them to teach in the school system of Utah.

According to table 11, 73, or approximately 67 per cent, of the 109 teachers of physical education in Utah for the year 1945-46 were adequately prepared to teach physical education. That is, they had either a major or a minor in physical education. On the other hand,

however, there were 36, or about 33 per cent, of the teachers who had neither a major nor a minor in physical education.

An overall picture of table 12 shows that the majority of teachers of physical education were not adequately prepared to teach the different subjects they were assigned in addition to physical education. Fifty-eight per cent of the teachers who taught health were not prepared to teach health. Sixty-six per cent were not prepared to teach history, 89 per cent were not prepared to teach mathematics. Similarly, we find that 91 per cent of the teachers teaching physiology and science were not prepared to teach those subjects.

Table 10. Certification of the teachers of physical education in high schools of Utah for the school year 1945-46.

Type of certificate	Number certified	Per cent
Utah general secondary (has to be renewed every five years)	71	65.1
Life certificate	17	15.6
State authorized	21	19.3
TOTAL	109	100.0

Table 11. Number and per cent of teachers teaching physical education who have either a major or a minor in physical education in high schools of Utah for the school year 1945-46.

	Number	Per cent
Teachers having a major in physical education	61	55.9
Teachers having a minor in physical education	12	11.0
Teachers having neither a major nor a minor in physical education	36	33.1
TOTAL	109	100.0

Table 12. Subjects taught by physical education teachers in high schools of Utah for school year 1945-46; number teaching, number and percent prepared, number and percent not prepared.

Subject	Number teaching	Number prepared	Per cent prepared	Number not prepared	Per cent not prepared
Physical education	109	73	66.9	36	33.1
Health	24	10	41.7	14	58.3
History	22	7	31.4	15	66.6
Mathematics	18	2	11.1	16	88.9
Physiology	11	1	09.1	10	90.9
Science	11	1	09.1	10	90.9
Civics	9	1	11.1	8	88.9
Industrial arts	8	0	00.0	8	100.0
Algebra	6	2	33.3	4	66.6
American problems	6	1	16.7	5	83.3
Social studies	5	1	20.0	4	80.0
Agriculture	4	3	75.0	1	25.0
Biology	4	0	00.0	4	100.0
Study hall	3				
Geometry	3	1	33.3	2	66.6
Speech	2	1	50.0	1	50.0
Farm shop	2	0	00.0	2	100.0
Office	2				
Chorus	2	2	100.0	0	00.0
Band	2	2	100.0	0	00.0
Chemistry	2	1	50.0	1	50.0
Physics	2	1	50.0	1	50.0
Bookkeeping	2	1	50.0	1	50.0
Eugenics	2	1	50.0	1	50.0
Business essentials	2	1	50.0	1	50.0
Consultant	1				
Dean of boys	1				
First aid	1	0	00.0	1	100.0
Spanish	1	1	100.0	0	00.0
Reading	1	1	100.0		
Grade school	1	0	00.0	1	100.0
Aeronautics	1	0	00.0	1	100.0
Religion	1	0	00.0	1	100.0

Table 12 (continued)

Subject	Number teaching	Number prepared	Per cent prepared	Number not prepared	Per cent not prepared
Commercial law	1	0	00.0	1	100.0
Type	1	1	100.0	0	00.0
Music	1	1	100.0	0	00.0
English	1	0	00.0	1	00.0
Economics	1	0	00.0	1	00.0
Guidance	1	0	00.0	1	00.0
Art	1	1	100.0	0	00.0

Chapter Five

ADMINISTRATIVE POINT OF VIEW

The prospective teachers of physical education are affronted by the following questions: "What should be my major and minor?" "What subject or subjects will I be assigned to teach?" The existence of these questions raises the problem of the situation in the high schools of Utah. Material for the school year 1945-46 has been gathered and analyzed for possible majors and minors and also for subjects prospective teachers may be assigned to teach.

A questionnaire was sent to the principals and superintendents of the public high schools in Utah, asking their opinions and recommendations on the preceding questions. Because of the positions they hold and the experience they have had, their answers should carry a great deal of weight in determining possible majors and minors for persons planning to enter the field of physical education in Utah.

Table 13 reveals the subject combinations recommended by principals as to the best to use in combination with physical education, number and per cent of times actually used in combination with physical education. Seventeen subjects were recommended by the sixty-eight principals. Health was recommended 41 times, while actually it was taught in combination with physical education by 24 or 22 per cent of the teachers. Physiology was recommended by 34 principals and used in combination by 11 teachers. Mathematics was recommended 14 times and was actually used by 18 teachers.

Using the recommendations of the principals as a guide, the best subjects to use in combination with physical education seem to be: First, health, followed by physiology, social science, mathematics, biology and science.

The superintendents of the high schools in Utah recommended 14 different subjects to teach in combination with physical education (see table 14). The returns from teachers showed that there were actually 39 different subjects taught by the physical education teachers in Utah. Twenty-seven superintendents, or about 33 per cent, recommended health as the best subject to teach in addition to physical education. Actually health was taught by 24 teachers. Physiology was next, being recommended by 20 superintendents, while in actuality physiology was used in combination by only 11 teachers. Mathematics was recommended only 4 times, while actually it was taught in combination by 18 teachers.

Following the recommendations of the superintendents, the subjects best suited for college major or minor would seem to be health, physiology, social studies, science, biology and mathematics.

Table 15 reveals the subjects recommended by administrators as best to use in addition to physical education, as compared to the number of teachers actually teaching these subjects. The administrators recommended a total of 21 different subjects that could be used in combination with physical education.

Health was recommended a total of 68 times by administrators. Actually there were only 24 teachers using health in combination with physical education. Physiology was recommended 54 times and was actually used by 11 teachers. Social science was listed 24 times and was used 5 times. Mathematics was recommended 18 times and used 18 times. History was recommended 3 times and was actually used as a combination by 22 physical education teachers.

Table 13. Subject combinations recommended by principals of high schools in Utah for school year 1945-46; number and per cent of times recommended, number and per cent of times actually taught by teachers.

Subject	Number and per cent of times recommended by principals		Number and per cent of times actually taught	
	Number	Per cent	Number	Per cent
Health	41	60.3	24	22.0
Physiology	34	50.0	11	10.1
Social science	16	23.5	3	02.8
Mathematics	14	20.6	18	16.5
Biology	12	17.5	4	03.7
Science	10	13.3	11	10.1
Eugenics	4	05.9	2	01.8
Drivers' education	3	04.4	0	00.0
History	3	04.4	22	20.1
Agriculture	2	02.9	4	03.7
English	2	02.9	1	01.1
Chemistry	2	02.9	2	01.8
Guidance	2	02.9	1	01.1
Physics	1	01.5	2	01.8
Safety	1	01.5	0	00.0
Shop	1	01.5	8	07.3
Civics	1	01.5	9	08.3

Table 14. Subjects recommended by superintendents of the high schools of Utah for school year 1945-46, as best to use in combination with physical education. Number of times recommended as compared to the number of times actually taught by teachers.

Subject	Number and per cent of times recommended by superintendents		Number and per cent of times actually taught	
	Number	Per cent	Number	Per cent
Health	27	32.9	24	22.0
Physiology	20	24.4	11	10.1
Social studies	8	09.8	3	02.8
Science	6	07.3	11	10.1
Biology	4	04.9	4	03.7
Mathematics	4	04.9	18	16.5
Civics	2	02.4	9	08.3
American problems	2	02.4	6	05.5
Recreation	2	02.4	0	00.0
Eugenics	2	02.4	2	01.8
English	2	02.4	1	01.1
Safety	1	01.2	0	00.0
Zoology	1	01.2	0	00.0
Commerce	1	01.2	2	01.8

Table 15. Subjects recommended by administrators as best to use in combination with physical education, as compared to number of teachers teaching these subjects in the high schools of Utah for year 1945-46.

Subject	Times recommended by superintendents	Times recommended by principals	Total times recommended by administrators	Number of teachers teaching subject
Health	27	41	68	24
Physiology	20	34	54	11
Social science	8	16	24	5
Mathematics	4	14	18	18
Biology	4	12	16	4
Science	6	10	16	11
English	2	2	4	1
Eugenics	4	0	4	2
Drivers' education	0	3	3	0
History	0	3	3	22
Civics	2	1	3	9
Chemistry	0	2	2	2
Agriculture	0	2	2	4
American problems	2	0	2	6
Guidance	0	2	2	1
Safety	1	1	2	0
Recreation	2	0	2	0
Physics	0	1	1	2
Shop	0	1	1	8
Zoology	1	0	1	0
Commerce	1	0	1	2

Using the recommendations of the administrators as a guide, the best subjects, listed in order, to be studied in addition to physical education would be health, physiology, social science, mathematics, biology and science.

In answering the question, "What would be the best minor or minors for a man majoring in physical education?" Table 16 reveals the opinions of the superintendents as to what would be the best minor or minors for a man who plans to major in physical education. They listed a total of 18 different subjects that could be used as a minor. Analyzing the table we find that health was recommended a total of 20 times; however, health was actually used as a minor by only 11 of the 109 teachers of physical education. Biology and physiology were both recommended a total of 12 times. Biology wasn't used as a minor, while physiology was used as a minor 5 times. Social studies were suggested a total of 11 times as a possible minor, and was actually used as a minor by 7 teachers.

Principals of the high schools of Utah (table 17) suggested health 30 times as a possible minor. Actually health was used as a minor by 11 teachers. Social science was recommended 20 times and used as a major 2 times and a minor 7 times. Physiology was recommended a total of 18 times and used as a minor by 5 teachers.

In drawing a conclusion, if we take the opinions of the administrators as a criterion, health would be the best minor for a prospective teacher majoring in physical education, followed by social science, physiology, mathematics, science and biology.

Table 16. Superintendents' opinions as to the best minor or minors to use while majoring in physical education as compared with the number of times it was actually used as a major or minor by the physical education teachers in Utah for 1945-46.

Recommended minor	1st choice	2nd choice	3rd choice	Total times recom- mended	Number of times used as a major or minor	
					Major	Minor
Health	12	6	2	20	0	11
Biology	2	5	5	12	0	0
Physiology	6	6	0	12	0	5
Social studies	2	5	4	11	2	7
Mathematics	0	2	4	6	3	2
Recreation	2	1	3	6	0	0
Science	3	1	1	5	1	2
English	0	1	2	3	0	1
Civics	2	0	0	2	0	0
Psychology	1	0	1	2	0	0
Education	2	0	0	2	4	2
Chemistry	1	0	1	2	0	0
American problems	0	2	0	2	0	0
Music	1	0	0	1	4	0
Physics	0	1	0	1	0	0
Industrial arts	0	1	0	1	0	0
Art	0	1	0	1	1	0
Speech	0	0	1	1	1	2

Table 17. Principals' opinions as to the best minor or minors to use while majoring in physical education; as compared with the number of times it was actually used as a major or minor by the physical education teachers in Utah for 1945-46.

Recommended minor	Principals' opinion			Total times recom- mended	Number of times used as a major or a minor	
	1st choice	2nd choice	3rd choice		Major	Minor
Health	21	9	0	30	0	11
Physiology	8	10	0	18	0	5
Social science	7	6	7	20	2	7
Mathematics	5	7	4	16	3	2
Science	4	9	2	15	1	2
Biology	8	5	0	13	0	0
Eugenics	0	0	3	3	0	0
English	1	1	1	3	0	1
History	2	0	1	3	4	10
Chemistry	1	1	0	2	0	0
Shop	1	1	0	2	0	0
Agriculture	1	0	0	1	4	6
Guidance	0	1	0	1	0	1
Safety	0	1	0	1	0	0
Recreation	0	1	0	1	0	0
Psychology	0	1	0	1	0	0
Speech	0	0	1	1	1	2

A questionnaire was sent to principals of the high schools of Utah asking their opinions and the practices they followed in regards to certain phases of the physical education program in their schools. Seventy-three principals were sent questionnaires, of which 68 were returned. They were asked the following questions: I. To teach physical education should a teacher have a major in physical education? II. If a teacher has not a major in physical education, should he have a minor in physical education? III. Should a teacher teach physical education who has neither a major or minor in physical education but who was a good college athlete? IV. Should a man teach only physical education, or should he teach physical education in combination with other subjects?

The classification of this material in table 18 reveals the following opinions and the practices adhered to in the high schools of Utah:

I. Sixty-seven of the 68 principals stated that a teacher teaching physical education should have a major in physical education. Fifty-six principals replied that it was the practice in their schools to have a man with a major in physical education teach physical education. It was the practice in 12 schools not to have a major teach physical education.

II. It was the opinion of all the principals that a man should have at least a minor in physical education to teach physical education. As to the practice in their respective schools, twelve principals indicated that they had teachers of physical education who did not have a major in physical education but who had minors in physical education.

III. All of the 68 principals believed that a man should not teach physical education if he did not have a major or a minor in physical education, even though he had been a good college athlete. Fifteen principals indicated that they had teachers of physical education under this condition.

IV. Twenty-five principals indicated that they believed a teacher should teach only physical education. On the other hand, 43 principals stated that they did not think a teacher should teach only physical education. Sixteen schools indicated it was the practice for the teachers of physical education to teach only physical education. In 52 schools it was the practice not to teach only physical education. It was the practice in 52 schools to teach physical education in addition to other subjects, the practice in 16 schools was to teach only physical education.

The heads of physical education departments (table 19) were asked to give their opinions and recommendations on three questions. I. In physical education teacher placement, what subjects do principals and superintendents ask for most frequently in combination with physical education? II. In your opinion what would be the best subject or subjects to teach in combination with physical education? III. What minor or minors would you recommend for a person majoring in physical education?

In reviewing the table we find in question I that health, physiology and coaching were the subjects most frequently asked for in combination with physical education. According to this table, health, social science and mathematics are most frequently asked for in addition to physical education. As to subject combinations, all 3

institutions listed health as the best subject to teach in combination with physical education. According to these opinions health, recreation and mathematics would seem to be the best subjects to teach in combination with physical education. Question III asks for recommended minor or minors. Health was listed first by all three institutions. If these recommendations are taken as a criterion it would be best to minor in health, recreation, mathematics or physiology.

The teacher placement bureaus of the three universities in Utah (table 20) were asked the following questions: I. What are the subjects most frequently asked for in combination with physical education? II. In your opinion what would be the best subjects to teach in addition to physical education? III. What minor or minors would you recommend for a teacher majoring in physical education?

In reply to the first question, health was listed as the most frequently asked for subject followed by social science and mathematics. The best subjects to teach in addition to physical education were health and social science. The best minors would be health, mathematics and science.

Table 18. Opinions and practices of the principals in the high schools of Utah for 1945-46.

Question	Your personal opinion		Practice in your school	
	Yes	No	Yes	No
To teach physical education should a teacher have a major in physical education?	67	1	56	12
If a teacher has not a major in physical education, should he have at least a minor in physical education?	68	0	12	32
Should a teacher teach physical education who has neither a major or minor in physical education, but was a good college athlete?	0	68	15	
Should a teacher teach only physical education?	25	43	16	52
Should a teacher teach physical education in combination with other subjects?	43	25	52	16

Table 19. Opinions and recommendations of the heads of the physical education departments of the three colleges in Utah for 1945-46.

Question	College #1	College #2	College #3
In physical education teacher placement, what subjects do superintendents and principals ask for most frequently in combination with physical education?	1. Health 2. Social science 3. Mathematics	1. Physiology 2. Exact science 3. Social science	1. Coaching 2. Health 3. Science
In your opinion, what would be the best subjects to teach in combination with physical education?	1. Health 2. Recreation 3. Math	1. Health 2. Social science 3. Math	1. Health 2. Recreation 3. Biology
What minors would you recommend for a man majoring in physical education?	1. Health 2. Recreation 3. Physiology	1. Health 2. Social science 3. Recreation	1. Health 2. Recreation 3. Physiology

Table 20. Opinions and recommendations of the teacher placement
bureaus of the three colleges in Utah for 1945-46.

Question	College #1	College #2	College #3
In men physical education teacher placement, what subjects do superintendents and principals ask for most frequently in combination with physical education?	1. Health 2. Social science 3. Math	1. Exact science 2. Social science 3. History	1. Health 2. Science 3. Physiology
In your opinion what would be the best subjects to teach in combination with physical education?	1. Health 2. History 3. Physiology	1. Health 2. Psychology 3. Social science	1. Social studies 2. Speech 3. Health
What minors would you recommend for a man majoring in physical education?	1. Health 2. Math 3. Physiology	1. Health 2. Social science	1. Guidance 2. Administration 3. Business

Chapter Six

SUMMARY

As a result of a thorough study of the available data, we are now ready to summarize the study of "Physical Education and Subject Combinations." In stating conclusions, it is well to keep in mind the aims of the study, namely, what subjects do teachers in physical education teach in combination with physical education? To a limited extent, are they prepared to teach physical education and these other subjects? Are the classes they teach in accord with the opinions of the superintendents and principals who hire these teachers, and also, with the opinions of the directors of the college physical education departments who train these teachers? It was also an aim of this paper to get the recommendations and opinions of principals, superintendents and directors of college physical education departments as to what they thought would be the best minor for a person majoring in physical education.

In interpreting the data of this thesis, it must be remembered that this is not a comprehensive study in teaching combinations of the physical education teachers. One of the major problems was that of delimitation and selection of significant phases of the problem. It must also be recognized that the opinions expressed in this thesis are those of superintendents and principals of the various school systems in Utah, and also of the directors of college physical education departments. However, one must assume that these opinions and recommendations are honest, coming from professional men who should possess some very practical knowledge after many years of experience.

From the conclusions at the end of the various parts, the following conclusions of the study are presented:

(1) In the conclusions and summary obtained from related studies we find that the beginning teachers of physical education are called upon to teach a great variety of subjects. They teach from at least one to three subjects besides physical education and in some cases four, five and even six subjects in combination with physical education.

(2) In the related studies the subjects most frequently taught with physical education are as follows: history, social science, mathematics and science.

(3) In the related studies most of the writers concluded that a great per cent of the teachers of physical education were asked to teach a variety of subjects for which they were inadequately prepared. This condition seemed to exist mainly in the smaller high schools of below 500 enrollment.

(4) There are 26, or about 24 per cent, of the teachers who teach only physical education. Thirty-five teachers teach one other subject in addition to physical education, 21 teach two other subjects, 16 who teach three other classes, 6 teach four other subjects and 5 who teach five other subjects.

(5) A total of 39 subjects were listed by the 109 teachers of physical education as being used in combination with physical education. Health was listed a total of 24 times, history was next with 22, followed by mathematics with 18, physiology with 11, science with 11, and civics by 9 teachers.

(6) There are 58, or about 53 per cent, of the teachers who teach the same subject combinations from year to year. Fifty-one, or 47 per cent, of the teachers do not teach the same subject combinations from year to year.

(7) In the high schools of Utah, there are 21, or 20 per cent, of the teachers teaching physical education who are not certified teachers, but are teaching under letters of authorization.

(8) There are 61, or 56 per cent, of the teachers who have a major in physical education. There are 12 teaching physical education who have just a minor in physical education. There are 36, or 33 per cent, of the teachers teaching physical education who have neither a major or a minor in physical education.

(9) There are 73 teachers teaching physical education who are prepared to teach this subject. Thirty-six, or about 33 per cent, are not prepared. There are 10 out of 24 teachers teaching health who are prepared to teach health; 58 per cent of the teachers teaching health are not prepared. There are 66 per cent teaching history who are not prepared to teach history.

(10) Health was recommended by 60 per cent of the principals as best to use in combination with physical education, followed by physiology, social science, mathematics, biology and science.

(11) In comparison with the above conclusion, we find that only 22 per cent of the teachers were teaching health. Twenty per cent were teaching history, followed by physiology, with 11 per cent.

(12) Subjects recommended by superintendents and principals as best to use in combination with physical education as compared to what is actually taught differ. We find that health was listed by 68 administrators, and actually taught by 24 teachers, physiology was listed by 54 and actually taught by 11, mathematics was listed by 18 and actually taught by 18 teachers, social science was listed by 24 and actually taught by 5.

(13) Directors of college physical education departments recommended the following as the best subjects to use in combination with physical education; health, mathematics, social science and biology.

(14) Superintendents and principals of the high schools in Utah recommended the following as the best subject to use as a minor for a man majoring in physical education; health, social science, physiology, biology, mathematics and science.

(15) Directors of college physical education departments recommend the following as the best minors for a man majoring in physical education; health, recreation, physiology and social science.

(16) All but one principal out of 68 believed that a man should have a major in physical education if he was assigned to teach physical education. All believed that he should have at least a minor. It was the practice in 56 schools to have men teach physical education who had a major in physical education.

(17) There were 25 principals who believed that the physical education teacher should teach only physical education. Only 16 schools reported that they had teachers teaching under this set-up. In 52 schools they were teaching physical education in addition to other subjects.

(18) The opinions of principals seem to indicate that the best subjects to teach in conjunction with physical education are: health, physiology, social science, biology and science.

(19) The opinions of the superintendents seem to indicate that the best subjects to teach in addition to physical education are: health, physiology, social science, biology and mathematics.

(20) The subjects used most by the teachers in combination with physical education are: health, history, mathematics, physiology and science.

Chapter Seven

CONCLUSIONS AND RECOMMENDATIONS

After studying the subject combinations in the high schools of Utah, the following conclusions are presented:

1. Some physical education teachers in Utah teach a variety of subjects in addition to their regular classes of physical education. These classes are: health, history, mathematics, physiology, and science.
2. Many teachers of physical education do not teach the same combination of subjects from year to year, but are assigned to teach different subjects each year.
3. Prospective teachers of physical education in Utah should expect to teach from one to four subjects in addition to physical education. These subjects most likely should be health, history, mathematics, physiology, science or civics.
4. A professional student in physical education should choose a minor in at least two fields, preferably from the following: health, social science, physiology, biology, mathematics, science or recreation.
5. This study was made during the period immediately following World War II. The writer recommends that a similar study be made of the condition existing today.

LITERATURE CITED

1. Anderson, Earl W. Combination of subjects. Ed. Res. Bull. 8:234. May 29, 1929.
2. Baer, J. A. Do high school teachers teach the subjects for which they are trained? Ed. Res. Bull. 7:23-28. Jan. 25, 1928.
3. Boles, L. C. The progress of physical education and athletics in our educational system. The Phys. Ed. Proc., Dec. 29, 1937.
4. Coombe, Ralph. Teaching combinations of the men physical education teachers in the class B and C public high schools in Michigan. Master's Thesis, University of Michigan, 1932.
5. Davis, Elwood C., and Lawther, John D. Successful teaching in physical education. New York, Prentice-Hall Inc., 1941.
6. Elliot, Ruth. Professional Training in Physical Education.
7. Hall, Vaughan L. Organization and administration of programs of physical education in selected higher institutions. Utah State Agricultural College. Master's Thesis. 1947.
8. Heiges, J. S. How many and what subjects should a high school school teacher in Pennsylvania be prepared to teach? School Review, 38:286. April 1930.
9. Horton, Clifford E., A report on teaching combinations in physical education in the high schools of Illinois. The Research Quarterly, 4:39-50. October 1933.
10. Kirby, T. J. Subject combinations in high school teacher's programs. School Review, 34:494. September 1926.
11. Lodewyk, Bourke W. Subject combinations taught by the men teachers of physical education in the class A and D public high schools of Michigan. University of Michigan. Master's Thesis, 1935.
12. Mason, O. C. The teaching combinations of the men physical education teachers in region seven of the Western Pennsylvania Interscholastic Athletic League. Univ. of Michigan. Master's Thesis, 1934.
13. Miller, Albert H. The teaching combinations of men physical education teachers in the first grade four year county high schools in the State of Ohio. Univ. of Michigan, Master's Thesis, 1938.
14. Moore, H. E. A study of the subjects taught by 1037 teachers of health and physical education of public high schools of Indiana. Research Quarterly 4:29. October 1933.

15. Nash, Jay B. *The Administration of Physical Education*. New York. A. S. Barnes and Co., 1934. Pp. 225.
16. Nixon, Eugene W., and Cozens, Frederick W. *An Introduction to Physical Education*. W. B. Saunders Co., 1934. 263 pp.
17. Rhodes, Earl N. The extent to which graduates from the differentiated curricula of teachers colleges teach in their specialized fields. *Educational Administration and Supervision*. 15:667. December 1929.
18. Roop, Amy G. *The woman high school teacher of physical education in the service area of the Central Missouri State Teachers College*. New York Univ., Master's Thesis. 1936.
19. Schwehn, Hilda M. *The educational responsibilities outside the classroom of women instructors of physical education in the State of Indiana*. Purdue Univ. Master's Thesis. 1938.
20. Sharman, Jackson R. *The Teaching of Physical Education*. New York, A. S. Barnes and Co., 1936, 237 pp.
21. Street, Claude W. A study of suitable majors or minors that are used in combination with physical education. *Research Quarterly*. 4:39. October 1933.
22. Tuberville, Thomas Floyd. *The status of health and physical education in the first class high schools of Missouri*. Univ. of Colo. Master's Thesis, 1936.
23. Voltmer, Edward F., and Esslinger, Arthur A. *The Organization and Administration of Physical Education*. New York. F. S. Crofts and Company, 1942, 476 pp.
24. Wood, Thomas D., and Brownell, Clifford L. *Source Book in Physical Education*. New York, Macmillan Co., 1925, 590 pp.
25. Woody, Clifford. Number of subjects taught by graduates of the University of Michigan who began teaching in the 1922-23 school year and the amount of preparation on the subjects taught. *Educational Administration and Supervision*. 10:368-384. Sept. 1924.
26. Woody, Clifford. Study on the number and combination of subjects taught in the north central high schools of Michigan. *Educational Administration and Supervision*. 12:529-548. Nov. 1926.
27. Williams, Jesse F. *The Principles of Physical Education*, 4th Ed. W. B. Saunders Co., Philadelphia, 1942. 392 pp.

28. Williams, J. F., and Morrison, W. R. A Text Book of Physical Education. Philadelphia, W. B. Saunders Co., 1931, 343 pp.
29. Yocom and Hunsaker, Individual Sports for Men and Women, A. S. Barnes and Co., 1945, 287 pp.

APPENDIX

Dear Sir:

To complete the requirements of a Master's Degree, I am making a study on "Physical Education Teachers and Their Teaching Combinations". I would like to take a few minutes of your very valuable time to answer a few questions, on an enclosed questionnaire, that will enable me to complete this study. Also enclosed is a self-stamped self-addressed envelope, which you can mail to me, together with the questionnaire, at your earliest convenience.

Thanks for your kind consideration.

Sincerely,

QUESTIONNAIRE

I In hiring men physical education teachers, which following pre-requisite do you consider the most important?

Check one you consider most important.

A- He should have either a major or minor in physical education?

B- He should have been a good college athlete, but with neither a major or a minor in physical education?

II Usually the physical education teacher has to teach other subjects besides physical education. In your opinion, what is the most logical combination or combinations you consider best to teach in combination with physical education?

A- 1st choice _____

B- 2nd choice _____

C- 3rd choice _____

D- Other _____

III What minor or minors would you recommend for a man majoring in physical education?

A- 1st choice _____

B- 2nd choice _____

C- 3rd choice _____

D- Other _____

IV Remark:

QUESTIONNAIRE

Should a teacher who is teaching physical education have?

Your opinion		Practice in your school	
Yes	No	Yes	No

- a- Major in physical education.....
- b- Minor in physical education.....
- c- Been a good college athlete, but with neither a major or a minor in physical education.....

II Should the boys physical education teacher

- a- Teach only physical education?.....
- b- Teach physical education in combination with some other subjects?.....

III In your opinion what would be the best subject or subjects to teach in combination with physical education?

- a- 1st choice _____
- b- 2nd choice _____
- c- 3rd choice _____

IV What minor or minors would you recommend for a man majoring in physical education?

- a- 1st choice _____
- b- 2nd choice _____
- c- 3rd choice _____

V Remarks:

1945-46

Name of School _____ School's Enrollment _____

Name of coach or physical education instructor _____
(Underline whether coach or phys. edu. instructor, if both underline both.)

List in proper space all subjects on your daily teaching schedule for 1945-46 in the table below.

	Monday	Tuesday	Wednesday	Thursday	Friday
1st period					
2nd period					
3rd period					
4th period					
5th period					
6th period					
7th period					
8th period					

Teaching experience, number of years (include present year.) _____

College Major _____ College Minor _____

Bachelor's Degree Yes ___ No ___ From what institution? _____

Master's Degree Yes ___ No ___ From what institution? _____

Do you hold a Utah General Secondary Teaching Certificate? Yes ___
No _____

Salary you are now receiving _____.

Have you ever had any specialized training in any subject? Yes ___
NO _____

If so, in what subject, and what was the nature of the training? _____

Do you teach the same subject combinations from year to year? Yes ___ No _____

If you do not, list the different subjects you have taught besides Phys. Edu. in your present position. _____

QUESTIONNAIRE

I In men physical education teacher placing, what subject or subjects do superintendents and principals ask for most frequently in combination with physical education?

A. 1st _____

B. 2nd _____

C. 3rd _____

D. Other _____

II In your opinion what would be the best subject or subjects to teach in combination with physical education?

A. 1st _____

B. 2nd _____

C. 3rd _____

D. Other _____

III What minor or minors would you recommend for a man majoring in physical education?

A. 1st _____

B. 2nd _____

C. 3rd _____

D. Other _____

Remarks by Superintendents

In the questionnaire sent to the superintendents, the writer included a space for remarks by the superintendents. Some obliged by submitting a few remarks that may have some bearing on this paper.

In my opinion the physical education instructor should have an aptitude in his field, but that doesn't imply that he must be a great college athlete. His ability to visualize the possibilities of a physical education program for the development of the students from a sociological point of view is practically as important as the physical development. It should always be considered as a most important concomitant.

A physical education teacher can direct his students in fine experiences of good citizenship.

A physical education major should minor in that subject taught in the high school for which he has the most aptitude.

To have been a good college athlete lends prestige. Athletics usually helps build the kind of personality that makes for success in teaching, especially boys, but also girls.

Should be trained so he can direct summer recreation.
